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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/700,747	11/20/2000	Benyahia Nasli-Bakir		4239

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EXAMINER

FLETCHER III, WILLIAM P

ART UNIT	PAPER NUMBER
1762	9

DATE MAILED: 04/03/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/700,747	NASLI-BAKIR ET AL.
	Examiner William P. Fletcher III	Art Unit 1762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on _____.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 16-38 is/are pending in the application.

 4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 16-38 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

 a) All b) Some * c) None of:

 1. Certified copies of the priority documents have been received.

 2. Certified copies of the priority documents have been received in Application No. _____.

 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
 a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.	6) <input type="checkbox"/> Other: _____

Detailed Office Action

Note: The text of those sections of Title 35, U.S. Code, not included in this action

5 can be found in a prior Office action.

I. ***Response to Amendment***

The examiner acknowledges receipt of the applicants' amendment filed 28
10 January 2002, made of record in this file as paper no. 8, in which claims 16, 24, and 26
were amended, and new claims 31 – 38 were added.

II. ***Form & Content of the Application***

15 Claims

The objection to claim 24, made under this section in paper no. 7, is hereby withdrawn.

III. ***Claims Rejections under 35 U.S.C. § 103***

20

> **Claims 16 – 32** are rejected under 35 U.S.C. § 103(a) as being unpatentable over Vesterlund et al. {US 6,284,090 B1} in view of Andersson {US 4,175,065}.

With respect to claims 16, 25 – 27, and 29 – 32, Vesterlund et al. teach a gluing system based on at least two components: a resin component and a hardener component. The hardener component is based on acids like formic acid [c. 1, ll. 22 – 25]. A first fluid component (hardener) is brought to flow in a first stream, and a second fluid component (resin) is brought to flow in a second stream, whereby the flow of the second stream is brought to essentially encircle the flow of the first stream [c. 2, ll. 44 – 57]. Vesterlund et al. teach that the method is particularly suited for supplying thermosetting resin gluing systems such as melamine-urea-formaldehyde, urea-formaldehyde, and melamine-formaldehyde [c. 1, ll. 15 – 20]. Vesterlund et al. further teach that the coatings may be applied in a stream, jet, or ray [c. 1, ll. 66 – 67].

Vesterlund et al. are silent with respect to whether or not the hardener comprises a filler. Based on this fact, it is the examiner's position that one of ordinary skill in the art would have reasonably interpreted the hardener as being free of filler.

15 Andersson teaches a gluing system based on a liquid resin and a liquid hardener similar to the system taught by Vesterlund et al. [cc. 1 – 2]. A filler can be mixed into the hardener composition in order to alter the viscosity or increase the volume [c. 4, ll. 55 – 57]. Andersson further teaches that this filler comprises 0 – 50 wt.-% of the hardener composition [c. 5, ll. 5 – 10].

20 The filler does not take part in the chemical reaction between the resin and the hardener. It is merely added, as taught by Andersson, to control the viscosity and volume of the hardener composition. Vesterlund et al. does not require any filler at all,

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and Andersson teaches that fillers may be added to the hardener composition of a two-component gluing system in an amount of from 0 – 50 wt.-%.

Viscosity and volume of a coating composition effect, for instance, the coating characteristics of the composition. Control of such properties would have been well-
5 within the level of skill of a practitioner in the art.

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize a hardener without a filler, as taught by Vesterlund et al., or to utilize a hardener comprising a filler the amount of which having been optimized by routine experimentation with appropriate regard to the desired viscosity and volume
10 of the hardener composition — including filler amounts of from 0 – 50 wt.-% as taught by Andersson, which range encompasses the ranges claimed by the applicants [*In re Boesch*, 205 USPQ 215 (CCPA 1980); *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990); and *In re Aller*, 105 USPQ 233 (CCPA 1955)].

15 With respect to claim 17, Vesterlund et al. teach that the flow of each or both of the components may be pumped or propelled by gravitational forces, or a combination thereof, and that the stream of fluid component may be a stream, jet, or ray. Therefore, it is the examiner's position that Vesterlund et al. suggest applying the resin component in the form of strands and applying the hardener by spraying.

20

With respect to claims 18 – 20, Andersson teaches that the components of the gluing system are separately applied in the form of strands. In c. 5, Example 1, Andersson teaches that the later applied strands of the hardener component

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substantially overlap the correspondingly previously applied strands of the resin component. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have used a bead coater, as taught by Andersson, in the method of Vesterlund et al., as suitable means of applying the two-component gluing system to the substrate because Vesterlund et al. and Andersson teach similar gluing systems.

With respect to claims 21 and 22, the Examiner acknowledges that neither Vesterlund et al. nor Andersson teach the layout of the resin and hardener components claimed by the applicants. However, it is the examiner's position that the layout of the components will have an effect on the curing time of the glue system, and that it would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have determined the optimum layout of the resin and hardener components through routine experimentation in the absence of a showing of criticality, including one of the layouts claimed by the applicants.

With respect to claims 23 and 28, Vesterlund et al. is silent as to the amount of volatile acid present in the hardener composition. It is the examiner's position that the amount of volatile acid in the hardener composition will effect the setting time of the resin component, and will depend on other components present in the hardener composition, the type of volatile acid used in the composition, the type of resin component being used, and the nature of the substrate to which the composition is being applied. It would have been obvious to one of ordinary skill in the art, at the time

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the invention was made, to have determined the optimum amount of the volatile acid in the hardener composition through routine experimentation in the absence of a showing of criticality [*In re Boesch*, 205 USPQ 215 (CCPA 1980); *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990); and *In re Aller*, 105 USPQ 233 (CCPA 1955)].

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With respect to claim 24, neither Vesterlund et al. nor Andersson specifically teach the weight ratio of hardener to resin. It is the examiner's position that the weight ratio of hardener to resin will depend on the type of volatile acid and the type of resin that is used, as well as the desired curing time for the composition on the substrate. It 10 would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have determined the optimum weight ratio of hardener to resin by routine experimentation in the absence of a showing of criticality.

> Claims 33 – 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable 15 over Vesterlund et al. {US 6,284,090 B1} in view of Andersson {US 4,175,065}.

With respect to claims 33, 35 – 38, Vesterlund et al. teach a gluing system based on at least two components: a resin component and a hardener component. The hardener component is based on acids like formic acid [c. 1, ll. 22 – 25]. A first fluid 20 component (hardener) is brought to flow in a first stream, and a second fluid component (resin) is brought to flow in a second stream, whereby the flow of the second stream is brought to essentially encircle the flow of the first stream [c. 2, ll. 44 – 57]. Vesterlund et al. teach that the method is particularly suited for supplying thermosetting resin

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gluing systems such as melamine-urea-formaldehyde, urea-formaldehyde, and melamine-formaldehyde [c. 1, ll. 15 – 20]. Vesterlund et al. further teach that the coatings may be applied in a stream, jet, or ray [c. 1, ll. 66 – 67].

Vesterlund et al. are silent with respect to whether or not the hardener comprises 5 a filler. Based on this fact, it is the examiner's position that one of ordinary skill in the art would have reasonably interpreted the hardener as being free of filler.

Andersson teaches a gluing system based on a liquid resin and a liquid hardener similar to the system taught by Vesterlund et al. [cc. 1 – 2]. A filler can be mixed into the hardener composition in order to alter the viscosity or increase the volume [c. 4, ll. 10 55 – 57]. Andersson further teaches that this filler comprises 0 – 50 wt.-% of the hardener composition [c. 5, ll. 5 – 10].

The filler does not take part in the chemical reaction between the resin and the hardener. It is merely added, as taught by Andersson, to control the viscosity and volume of the hardener composition. Vesterlund et al. does not require any filler at all, 15 and Andersson teaches that fillers may be added to the hardener composition of a two-component gluing system in an amount of from 0 – 50 wt.-%.

Viscosity and volume of a coating composition effect, for instance, the coating characteristics of the composition. Control of such properties would have been well-within the level of skill of a practitioner in the art.

20 It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize a hardener without a filler, as taught by Vesterlund et al., or to utilize a hardener comprising a filler the amount of which having been optimized by routine experimentation with appropriate regard to the desired viscosity and volume

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of the hardener composition — including filler amounts of from 0 – 50 wt.-% as taught by Andersson, which range encompasses the ranges claimed by the applicants. [*In re Boesch*, 205 USPQ 215 (CCPA 1980); *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990); and *In re Aller*, 105 USPQ 233 (CCPA 1955)].

5

With respect to claims 34, Vesterlund et al. is silent as to the amount of volatile acid present in the hardener composition. It is the examiner's position that the amount of volatile acid in the hardener composition will effect the setting time of the resin component, and will depend on other components present in the hardener composition, 10 the type of volatile acid used in the composition, the type of resin component being used, and the nature of the substrate to which the composition is being applied. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to have determined the optimum amount of the volatile acid in the hardener composition through routine experimentation in the absence of a showing of criticality 15 [*In re Boesch*, 205 USPQ 215 (CCPA 1980); *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990); and *In re Aller*, 105 USPQ 233 (CCPA 1955)].

IV. Response to Arguments

20 Applicant's arguments filed 28 January 2002 have been fully considered but they are not persuasive.

In response to the applicant's arguments against the references individually, one cannot show non-obviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

5

The applicants have argued that Andersson provides no guidance as to how much filler should be added to the hardener composition of Vesterlund et al.

The filler does not take part in any chemical reaction between the resin solution and hardener solution. It is added, Andersson expressly teaches, to adjust the viscosity and volume of the hardener composition. It would have been well-within the level of skill of a practitioner in the art to control both of these properties of the hardener composition. Generally speaking, if a composition is too viscous, it is difficult to spread or disperse on a surface. If a composition is not viscous enough, it runs off of the surface to be coated. The volume of a coating composition is of interest when considering how to store and apply the composition.

Therefore, since both of these properties would have been of keen interest to one of ordinary skill in the art, and Andersson teaches that a filler may be added in quantities of 0 – 50 wt.-% to the hardener composition of a two-component gluing system in order to adjust these properties, it would have been obvious to optimize the amount of filler added to the hardener composition by routine experimentation. Including, as taught by Andersson, 0 – 50 wt.-%, which encompasses and fully includes all of the ranges claimed by the applicants.

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V. Conclusion

THIS ACTION IS MADE FINAL. The applicants are reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

5 A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any 10 extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the 15 examiner should be directed to William P. Fletcher III whose telephone number is (703) 308-7956. The examiner can normally be reached on Monday through Thursday, 7 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on (703) 308-2333. The fax phone numbers 20 for the organization where this application or proceeding is assigned are (703) 305-9310 for regular communications and (703) 305-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

William Phillip Fletcher III
Patent Examiner
United States Patent & Trademark Office
Group Art Unit 1762

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wpf

March 28, 2002

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